

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: LUMARK

Report Number: P884278

Luminaire Tested: **NAV-SB5A-735-U-T3-HSS**

Issue Date: 10/7/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P884278  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/7/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5A-735-U-T3-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

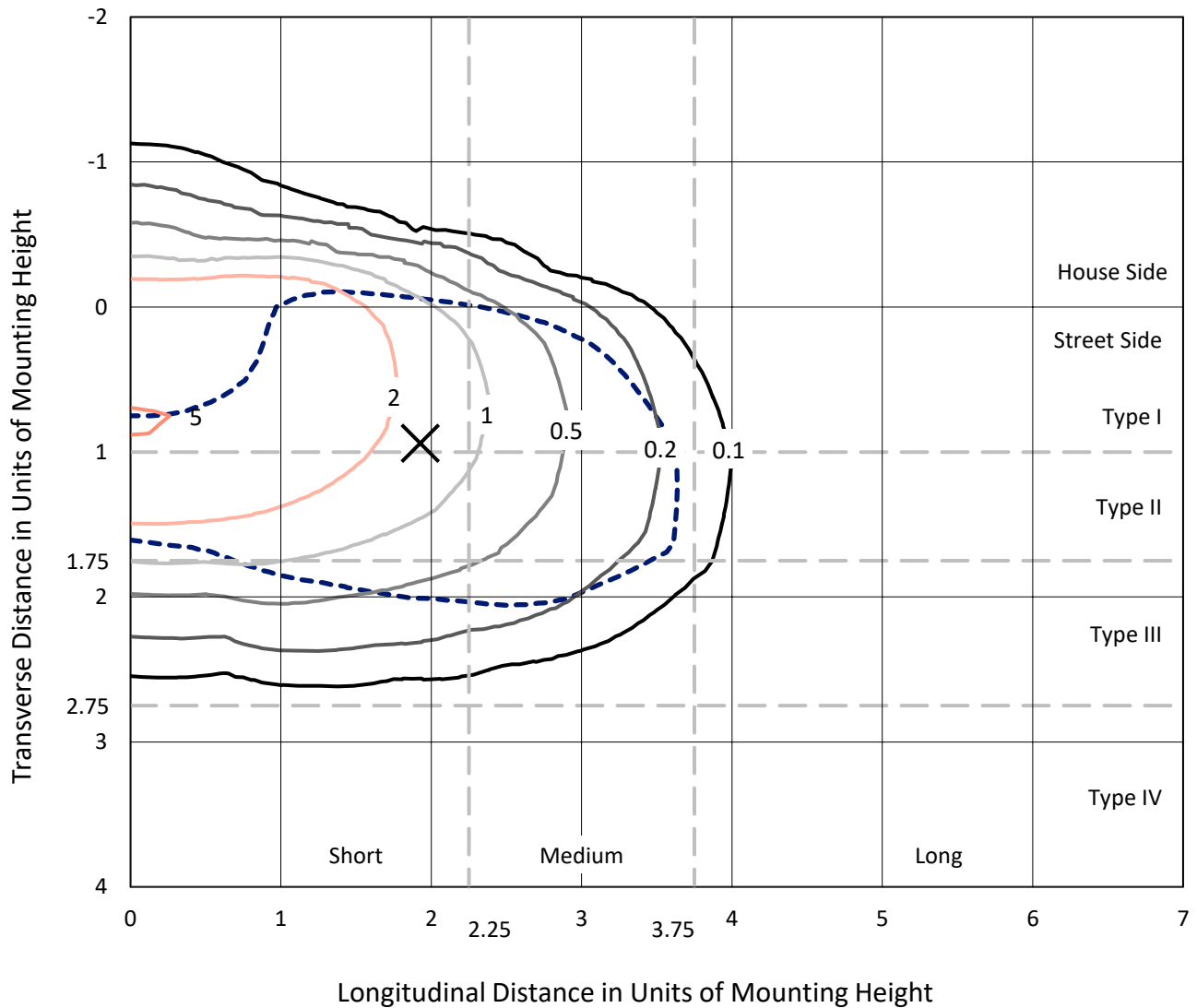
Lumens per Lamp: N/A  
Luminaire Lumens: 17852 lumens  
Efficiency: N/A  
Efficacy: 126.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G3  
  
Input Watts (W): 141.7  
Input Voltage (V): 120.0  
Input Current (Ain): 1.201  
Voltage Rise (V): NR  
Power Factor: 0.992  
Total Harmonic Distortion (THDi): 10.503  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

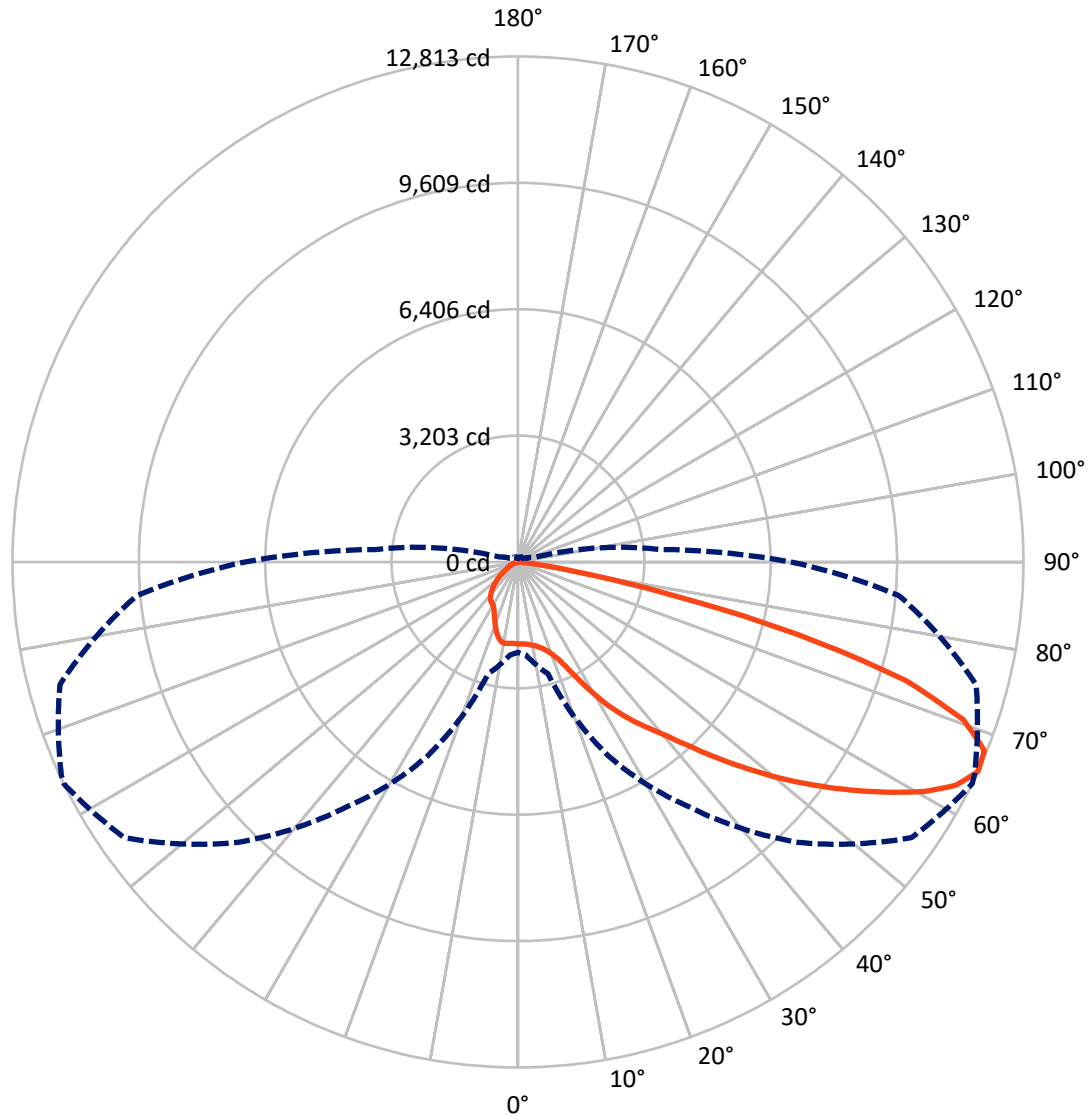
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2387.4	0.0	2387.4
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	15464.7	0.0	15464.7
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	17852.0	0.0	17852.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.6	1.1
10°-20°	519.6	2.9
20°-30°	984.6	5.5
30°-40°	1992.3	11.2
40°-50°	3393.9	19.0
50°-60°	4615.4	25.9
60°-70°	4334.1	24.3
70°-80°	1736.4	9.7
80°-90°	84.1	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	17852.0	100.0
0°-180°	17852.0	100.0

**Coefficient of Utilization**



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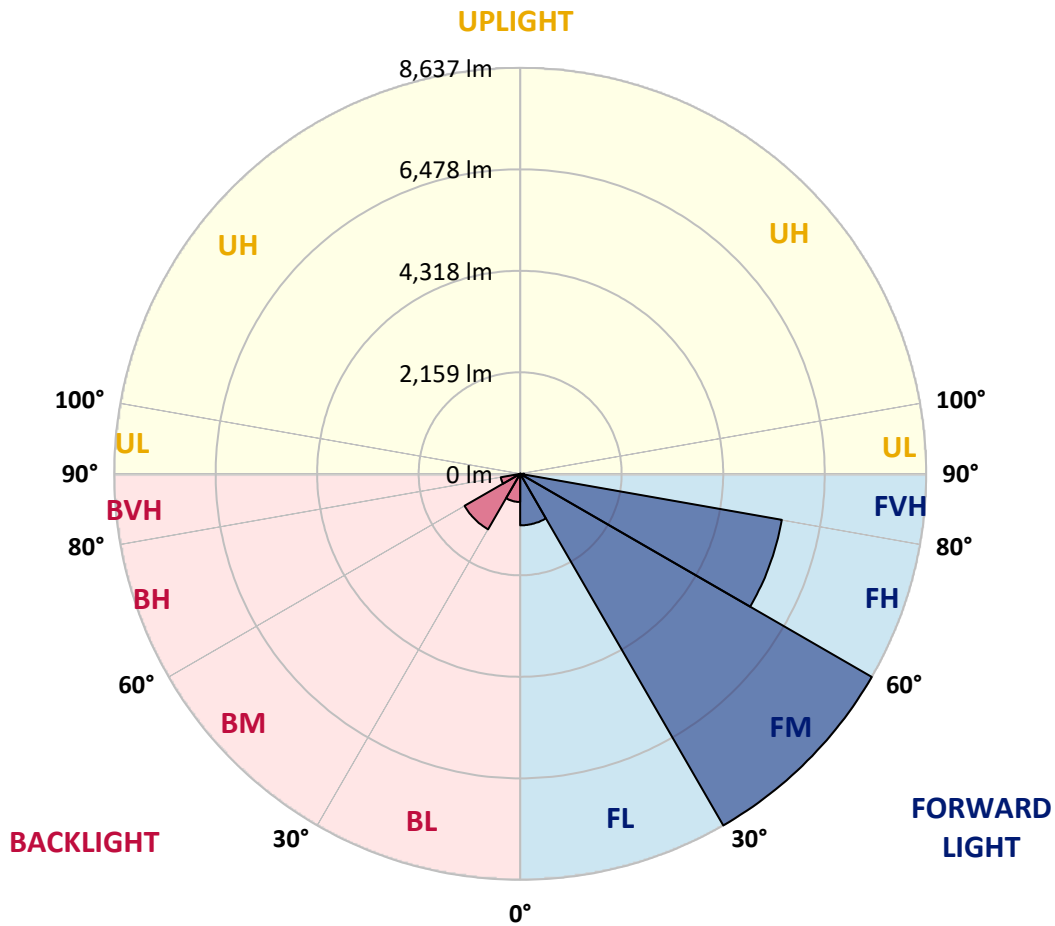
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1096.3	6.1			
FM (30°-60°)	8636.8	48.4			
FH (60°-80°)	5651.5	31.7			G3/7500
FVH (80°-90°)	80.0	0.4			G1/100
BL (0°-30°)	599.4	3.4	B2/1000		
BM (30°-60°)	1364.8	7.6	B2/2500		
BH (60°-80°)	419.0	2.3	B1/500		G1/500
BVH (80°-90°)	4.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	2076.4	2076.4	2076.4	2076.4	2076.4	2076.4	2076.4	2076.4	2076.4	2076.4	2076.4
2.5°	2069.2	2083.6	2080.0	2076.4	2075.2	2077.6	2078.8	2077.6	2077.6	2077.6	2078.8
5°	2029.7	2041.7	2041.7	2050.0	2062.0	2076.4	2087.1	2089.5	2091.9	2095.5	2094.3
7.5°	1954.3	1963.9	1971.1	1998.6	2028.5	2066.8	2099.1	2115.9	2118.3	2131.4	2136.2
10°	1902.8	1914.8	1926.8	1955.5	1998.6	2056.0	2111.1	2151.8	2157.8	2188.9	2203.2
12.5°	1900.4	1912.4	1928.0	1959.1	2009.4	2070.4	2137.4	2196.0	2206.8	2252.3	2282.2
15°	1925.6	1939.9	1954.3	1992.6	2046.5	2120.7	2192.5	2265.5	2276.2	2340.9	2373.2
17.5°	1977.0	1996.2	2007.0	2045.3	2102.7	2185.3	2279.8	2363.6	2373.2	2448.6	2489.3
20°	2078.8	2101.5	2105.1	2136.2	2192.5	2281.0	2393.5	2497.6	2509.6	2595.8	2641.2
22.5°	2289.4	2321.7	2293.0	2308.5	2358.8	2447.4	2569.4	2701.1	2717.8	2816.0	2856.7
25°	2660.4	2705.9	2631.7	2605.3	2626.9	2719.0	2872.2	3038.6	3057.7	3136.7	3157.0
27.5°	3389.2	3330.6	3218.1	3108.0	3043.4	3096.0	3268.3	3474.2	3498.1	3574.7	3550.8
30°	4189.8	4138.4	3986.4	3742.3	3589.1	3580.7	3739.9	3969.6	3997.2	4070.2	3997.2
32.5°	4991.7	4942.6	4777.5	4477.1	4211.4	4079.7	4189.8	4444.8	4459.1	4505.8	4398.1
35°	5780.3	5730.1	5564.9	5257.4	4930.6	4631.4	4609.9	4897.1	4901.9	4951.0	4790.6
37.5°	6573.8	6531.9	6356.0	6054.4	5732.5	5319.6	5119.7	5325.6	5331.6	5379.4	5213.1
40°	7139.9	7157.8	7036.9	6803.6	6527.1	6075.9	5691.8	5781.5	5745.6	5825.8	5726.5
42.5°	7625.7	7661.6	7556.3	7439.0	7278.7	6881.4	6400.3	6384.7	6327.3	6370.3	6267.4
45°	8045.8	8075.7	7981.2	7953.6	7950.1	7671.2	7174.6	7081.2	7001.0	6992.6	6869.4
47.5°	8200.2	8257.6	8298.3	8390.5	8570.0	8452.7	7975.2	7830.4	7740.6	7674.8	7479.7
50°	8258.8	8319.9	8458.7	8726.8	9151.6	9201.9	8772.2	8609.5	8499.4	8379.7	8092.5
52.5°	8179.8	8288.7	8475.4	8926.6	9542.9	9802.6	9537.0	9394.5	9268.9	9073.8	8647.8
55°	7714.3	7823.2	8205.0	8924.2	9738.0	10223.9	10259.8	10196.4	10055.2	9747.6	9096.5
57.5°	6733.0	6894.5	7498.9	8620.2	9734.4	10586.5	10968.3	11013.8	10855.8	10415.4	9449.6
60°	5373.4	5592.4	6329.6	7946.5	9434.0	10782.8	11589.4	11816.8	11649.2	11073.6	9735.6
62.5°	3749.4	4003.2	4700.9	6890.9	8747.1	10641.6	12043.0	12463.0	12336.2	11662.4	9845.7
65°	2287.0	2368.4	2930.9	5422.5	7579.1	10050.4	12183.0	12812.5	12770.6	12022.6	9683.0
67.5°	1523.5	1591.7	1753.2	3718.3	5883.3	8869.2	11847.9	12751.4	12763.4	11964.0	9087.0
70°	917.9	976.6	1081.9	2162.5	3812.9	7020.2	10810.3	11973.6	12043.0	11180.1	7957.2
72.5°	378.2	417.7	513.4	980.1	1974.6	4455.5	8608.3	10280.1	10441.7	9400.5	6107.0
75°	214.2	234.6	301.6	491.9	856.9	2076.4	5214.3	7297.8	7536.0	6479.2	3674.0
77.5°	142.4	152.0	195.1	318.3	482.3	708.5	2228.4	3802.1	4256.9	3538.8	1590.5
80°	95.7	104.1	134.0	213.0	313.6	304.0	709.7	1408.6	1732.9	1215.9	387.7
82.5°	64.6	65.8	95.7	140.0	198.7	147.2	209.4	438.0	550.5	351.8	147.2
85°	37.1	35.9	70.6	81.4	88.6	61.0	63.4	131.6	172.3	148.4	83.8
87.5°	4.8	7.2	27.5	21.5	12.0	13.2	13.2	22.7	33.5	35.9	18.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2076.4	2076.4	2076.4	2076.4	2076.4	2076.4	2076.4	2076.4	2076.4	2076.4	2076.4
2.5°	2078.8	2077.6	2074.0	2070.4	2062.0	2057.2	2059.6	2057.2	2056.0	2057.2	2062.0
5°	2094.3	2090.7	2081.2	2069.2	2052.4	2032.1	2018.9	1999.8	1981.8	1971.1	1973.5
7.5°	2136.2	2132.6	2119.5	2085.9	2032.1	1947.1	1869.3	1801.1	1749.7	1719.7	1720.9
10°	2203.2	2197.2	2176.9	2102.7	1961.5	1776.0	1621.6	1493.6	1409.8	1370.3	1366.7
12.5°	2282.2	2275.0	2239.1	2087.1	1827.4	1537.8	1324.8	1182.4	1104.6	1069.9	1066.3
15°	2375.6	2366.0	2295.4	2012.9	1632.4	1274.5	1079.5	973.0	922.7	891.6	892.8
17.5°	2491.6	2474.9	2337.3	1901.6	1420.6	1073.5	928.7	848.5	804.2	774.3	771.9
20°	2642.4	2614.9	2370.8	1768.8	1225.5	946.6	827.0	759.9	726.4	700.1	695.3
22.5°	2853.1	2813.6	2411.5	1625.2	1087.9	859.3	751.6	702.5	675.0	645.1	640.3
25°	3114.0	3067.3	2461.7	1492.4	993.3	783.9	696.5	655.8	623.5	588.8	585.2
27.5°	3479.0	3395.2	2521.6	1383.5	911.9	719.3	646.2	600.8	563.7	535.0	529.0
30°	3885.9	3748.2	2574.2	1317.6	837.7	659.4	580.4	535.0	500.2	479.9	476.3
32.5°	4271.2	4084.5	2608.9	1288.9	770.7	591.2	508.6	459.6	433.2	427.2	430.8
35°	4635.0	4388.5	2605.3	1261.4	710.9	523.0	438.0	387.7	367.4	371.0	371.0
37.5°	5053.9	4712.8	2580.2	1218.3	661.8	460.8	377.0	332.7	314.7	315.9	320.7
40°	5541.0	5087.4	2564.6	1136.9	608.0	403.3	326.7	290.8	277.6	272.9	271.7
42.5°	6060.4	5450.0	2567.0	1044.8	540.9	351.8	292.0	262.1	250.1	246.5	245.3
45°	6582.2	5795.9	2570.6	949.0	470.3	312.4	266.9	241.7	234.6	229.8	229.8
47.5°	7072.8	6090.3	2503.6	846.1	400.9	282.4	246.5	229.8	223.8	217.8	217.8
50°	7530.0	6286.6	2342.1	726.4	345.9	258.5	231.0	219.0	213.0	207.0	207.0
52.5°	7885.4	6317.7	2075.2	603.2	307.6	240.5	221.4	210.6	203.4	197.5	196.3
55°	8043.4	6122.6	1695.8	488.3	277.6	225.0	211.8	201.1	192.7	186.7	185.5
57.5°	8002.7	5712.1	1322.4	392.5	248.9	209.4	199.9	192.7	183.1	173.5	172.3
60°	7802.9	5162.8	996.9	326.7	222.6	192.7	186.7	180.7	167.5	153.2	150.8
62.5°	7457.0	4472.3	710.9	270.5	193.9	173.5	171.1	166.3	147.2	120.9	118.5
65°	6928.0	3633.4	478.7	225.0	166.3	152.0	153.2	144.8	119.7	89.8	87.4
67.5°	6154.9	2656.8	306.4	184.3	138.8	126.9	128.1	123.3	101.7	76.6	73.0
70°	5170.0	1759.2	199.9	140.0	111.3	98.1	105.3	106.5	86.2	62.2	59.8
72.5°	3790.1	1038.8	140.0	104.1	81.4	68.2	86.2	88.6	69.4	46.7	44.3
75°	2160.1	493.1	105.3	75.4	50.3	47.9	67.0	67.0	47.9	31.1	28.7
77.5°	907.1	205.8	74.2	49.1	28.7	27.5	45.5	41.9	23.9	14.4	14.4
80°	262.1	92.2	39.5	23.9	12.0	10.8	18.0	13.2	6.0	2.4	2.4
82.5°	102.9	40.7	15.6	9.6	4.8	4.8	2.4	0.0	0.0	0.0	0.0
85°	61.0	16.8	7.2	3.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	15.6	3.6	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)